

Appln. No.: 09/977,716
Reply to Office Action of August 20, 2003

UPN0015-103

Remarks/Arguments:**Status of Claims**

Claims 1 is in the application.

By way of this amendment, claim 1 has been amended and new claims 15-29 have been added.

Upon entry of this amendment, claims 1 and 15-29 will be pending.

Summary of the Amendment

The claims have been amended to define specific embodiments of the present invention. New claims 15-18 and 20-29 each depend directly or indirectly on claim 1 or claim 23.

No new matter has been added.

Rejections under 35 U.S.C. § 112, second paragraph

Claim 1 is rejected under 35 U.S.C. §. 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Office alleges that claim 1 is vague and indefinite because it is unclear whether or not the phrase "the amplified oligonucleotide," "the oligonucleotide," and the "stained oligonucleotide" refers to the RNA produced by RNA amplification since the term "oligonucleotide" can be interpreted that it includes DNA. Applicants respectfully disagree, but solely in order to further prosecution applicants have amended claim 1 to include the term "product" to refer to the product of the amplification step. One of skill in the art would clearly understand that the "amplified oligonucleotide product" is the oligonucleotide that results from the amplification step.

Rejections under 35 USC §103**Eberwine and Chu**

Claim 1 is rejected under 35 USC §103 in view of Eberwine (U.S. Patent 5,922,553) and Sano (U.S. Patent 5,631,129). It is asserted that Eberwine discloses quantification of epitopes using immuno-RNA amplification, Chu discloses a method of detecting RNA target using fluorogenic compounds that bind to RNA and therefore it would be obvious to one skilled in the art to combine the teachings of Eberwine and Chu to provide a method of quantifying epitopes using immuno-RNA

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amplification whereby the amplified RNA product is quantified using fluorescent label. Applicants respectfully disagree.

The amended claims state, "epitope detector comprising an oligonucleotide attached to a CDR mimetic or engineered CDR.". The Eberwine patent fails to teach or even suggest an epitope detector comprising an oligonucleotide attached to a CDR mimetic or engineered CDR. Eberwine also does not teach or suggest an epitope detector attached to streptavidin and an oligonucleotide binding to said detector. Eberwine also fails to teach or suggest an oligonucleotide comprising biotin that is able to bind to the epitope detector attached to streptavidin.

Chu specifically relates "co-functioning nucleic acid primers which are capable of forming a recombinant, autocatalytically replicatable RNA which has incorporated therein a target RNA sequence." (Chu, Column 4, lines 50-54). Moreover, Chu does not teach or suggest any means to achieve quantification using fluorescence. Chu also fails to teach or suggest quantification of epitopes using fluorescence. Chu also does not teach or suggest an epitope detector attached to streptavidin and an oligonucleotide binding to said detector. Chu also fails to teach or suggest an oligonucleotide comprising biotin that is able to bind to the epitope detector attached to streptavidin.

One skilled in the art would not combine the references. Chu does not employ fluorescence for the purposes it is used in the instant invention and Chu does not teach quantification. In fact, Chu does not teach or suggest quantification.

Furthermore, the combination of references do not yield the instant invention because neither of the reference teach all the elements in the pending claims including, for example, the epitope detector attached a CDR mimetic or engineered CDR. Accordingly, even if combined the references fail to produce the invention.

Applicants respectfully request that the rejection of claims under 35 USC §103 in view of Eberwine and Chu be withdrawn.

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Conclusion

Applicants respectfully urge that claims 1 and 15-29 be allowed at this time.

Respectfully submitted,



Daniel M. Scolnick, Ph.D., Reg. No. 52,201

Dated: August 11, 2005
Cozen O'Connor, P.C.
1900 Market Street
Philadelphia, PA 19102
Phone: (215) 665-6928
Phone: (215) 701-2029